

EXHIBIT A

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Term/Also Known As	Meaning
BCP or DR	Business Continuity Planning (BCP) and Disaster Recovery (DR) as the definition pertains to trader voice is a BCP or DR site that is a standby trading floor with all of the trader voice technologies required for trading in the event of a disaster. Generally these sites sit idle with a limited number of trading desks for key personnel should they not be able to access their main trading floor and its technologies. Financial institutions are required to have a BCP/DR site should their main trading floor not be available allowing them to trade from a different location.
Bridge	A feature that enables a way of connecting (bridging) two dedicated point-to-point private wires that connects 2 core telephony systems Traders using various signaling types for private wires. This consists of an A-End generally called the sell side and a B-End generally called the buy side in trader voice.
CDR	A call detail record (CDR) is a data record produced by a telephone carrier or other telecommunications equipment that documents the details of a telephone call or private wire call that passes through the Trader Voice Facilities or Trading System. The CDR contains attributes of the call, such as time, duration, completion status, source number, and destination number, source trader and destination trader.
Call Forking or Fork	A feature that enables an incoming call to ring several endpoints simultaneously. The first telephone to answer takes control of the incoming call while the other endpoints can access the line to join the call (barge in).
Carrier	Vendor of the private wire network that supports the client's trader voice system.

	Current vendors include: IPC, BT, Flexenet, and iMarket.
Channel-associated Signaling (CAS)	CAS is a telecommunications digital signaling method per channel of a TDM T1/E1. Its purpose is to route voice to its destination on a fixed channel. With CAS, this routing information is encoded and transmitted in the same channel as the payload itself. CAS T1/E1 can support 24 or 30 trader voice private wires.
Converged Unified Conference Solution (cUCS)	An interoperable unified conference environment designed for the trading floor and consumers of trader voice technologies.
Disparate Trading Systems	Trader voice systems inside and outside the client organization manufactured by different vendors.
DTMF driven IVR	Dual-tone multi-frequency signaling (DTMF) driven Interactive voice response (IVR) is a technology that allows humans to interact with a computer-operated phone system through the use of voice and DTMF tones input via a keypad. For example: if you call an office's main telephone number it might ask you to press 1 to speak to an operator or press 2 for a corporate directory or if you know the party's extension please enter it now using your phone's keypad.
Endpoint	The voice device or application that allows an end user to make and receive private wire calls and telephone calls..
Line Supervision	Not limited to: idle, ringing, busy, conferenced, or call cleared on a voice Endpoint.
Multicast	A group communication protocol in which data transmission is addressed to a group of destination computers simultaneously.
Private Branch Exchange (PBX)	Telephony system designed for general office users with a telephone endpoint.

Private Wires/private line, direct line, line, directs, speed dial, pw, ringdown, button, or private circuit.	Dedicated point-to-point voice channel that connects 2 core telephony systems Traders using various signaling types. Point-to-multipoint also exists between Traders. Signaling types include ARD, MRD, and Hoot.
Self Service Provisioning Tool	Ability to allow customers to provision new private wires and manage the conference profiles without disrupting service of the core system.
Session Initiation Protocol (SIP)	A standard internet protocol for initiating, maintaining, and terminating real-time interactive user session that can involve multimedia elements such as video, voice, chat, gaming, and virtual reality.
Signaling Types	ARD – Automatic ring down between endpoints. MRD – Manual ring down between endpoints and is usually established and put on speaker units for the ability to shout down the line. Hoot – Hoot & Holler or Squawk is an open broadcast connection generally used internally between end users. For example the Equity Trading Hoot, Government Hoot, Fixed Income Hoot, FX Hoot.
Time Division Multiplexing (TDM)	Used in this context as shorthand for proprietary phone systems that are hardwired connections from one building to another, and include legacy turrets and/or their legacy Trader Voice Facilities.
TDM Primary Rate Interface (PRI)	Used in this context as shorthand for telecommunications providers to provide TDM PRI T1 or E1. A PRI is the standard for providing telecommunication services to enterprises and offices. For example: if you call 212-xxx-xxxx the call will be routed over the TDM PRI to the office of its intended recipient. A TDM PRI T1/E1 can support 23 or 30 telephone calls at one time.

Trader	A generic term for the front office user. It is used to describe any person who sits on the trading floor. For inter-dealer brokers they are referred to as brokers on the trading floor.
Trader Voice Facilities	Network interfaces for the use of traders that allow for external voice communications between multiple core telephony systems. These can be either wired analog connections, digital interfaces (CAS TDM E1/T1), or VoIP (SIP) connections. Carriers provide these connections.
Trading System	Telephony system designed for financial trading firms with a turret endpoint.
Turret/dealerboard	Traditional trading system telephone endpoint.
Voice over Internet Protocol/VoIP	A communication system that converts voice transmissions into data packets and are server-based, allowing for better redundancy and easier global distribution than TDM technology
WebRTC	an open framework for the internet that enables Real-Time Communications (RTC) capabilities in a web browser also know as SIP over WebSockets
Lamping	Common Line Supervision